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Malladi

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(54) **METHOD AND APPARATUS FOR PROVIDING UPLINK SIGNAL-TO-NOISE RATIO (SNR) ESTIMATION IN A WIRELESS COMMUNICATION SYSTEM**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.**
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(52) **U.S. Cl.**
USPC **455/67.11**; 455/67.13; 455/450; 455/522; 455/63.1; 455/501; 455/115.3; 455/452.1; 370/330; 370/337; 370/342; 375/260; 375/265; 375/343; 375/227

(58) **Field of Classification Search**
USPC 455/67.11, 67.13, 450, 63.1, 446, 455/447, 501, 522, 115, 452.1; 381/94.3, 381/317; 370/330, 337, 342; 375/260, 343
See application file for complete search history.

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(57) **ABSTRACT**

A method and apparatus for providing uplink signal-to-noise ratio (SNR) estimation in a wireless communication system. A first signal is received over a first channel and a second signal is received over a second channel, where the second signal is received at a higher signal power level than said first signal. A signal-to-noise ratio (SNR) of the second signal is measured, and the SNR of the first signal is determined based at least in part upon the measured SNR of the second signal.

37 Claims, 7 Drawing Sheets